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January 1964

PHOTOGRAPHIC INTERPRETATION REPORT

OMSK STATIC TEST FACILITY, USSR



CIA



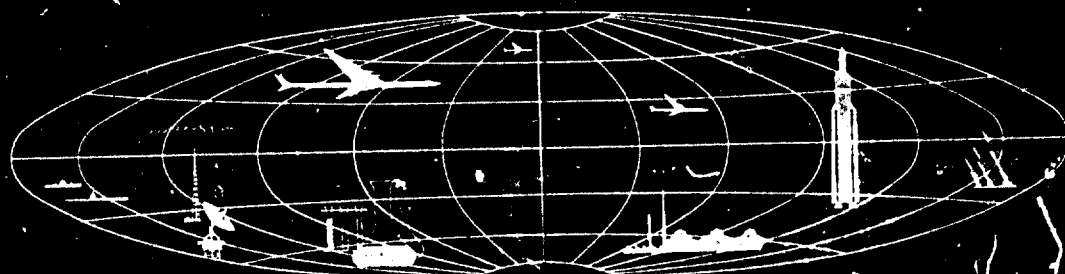
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NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



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## OMSK STATIC TEST FACILITY, USSR

## SUMMARY

The Omsk Static Test Facility consists of a completed vertical test stand, its adjoining operational support facilities, a possible second test stand under construction, and other support facilities.

25X1D This facility was under construction in [REDACTED] at which time the blast pit for the first test stand was being excavated. The test stand was first visible on photography of [REDACTED] and appeared complete on photography of [REDACTED]. It measures 80 by 50 feet and its tower is approximately 55 feet

in height. Access to the tower is via a two-level bridge, the upper level being 40 feet above the lower. The upper level may house hoisting equipment for handling the items being tested. Accordingly, whatever devices are tested would probably be less than 40 feet in length.

Construction activity at the site of the possible second test stand was visible on photography of [REDACTED]. The possible blast pit for this stand was being excavated in [REDACTED].

## INTRODUCTION

25X1A The Omsk Static Test Facility [REDACTED]  
25X1A [REDACTED] is located in the USSR at 55-25N

73-17E (Figure 1). The site is 2 nautical miles (nm) southwest of the village of Gornaya

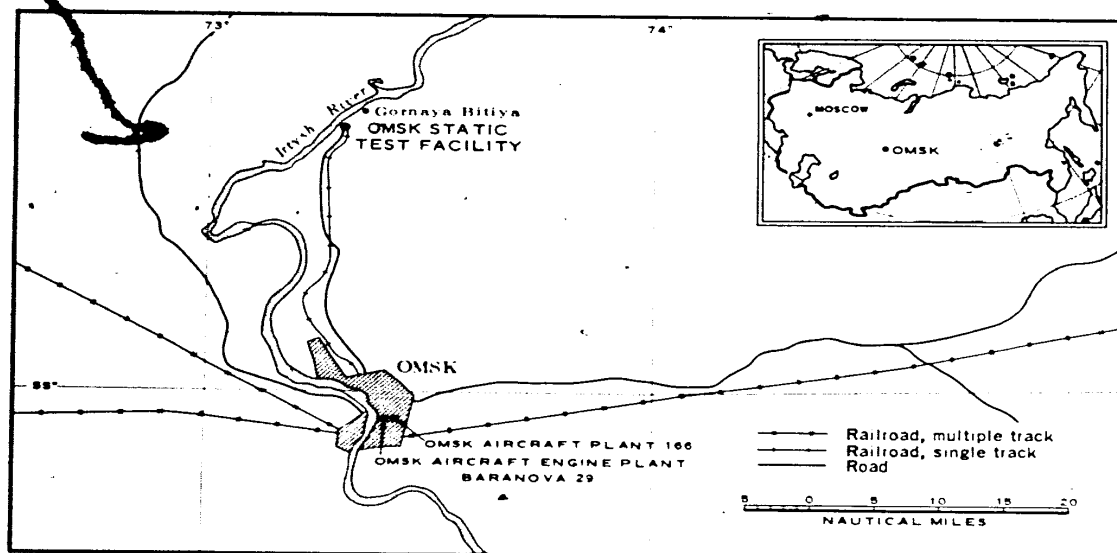


FIGURE 1. LOCATION MAP.

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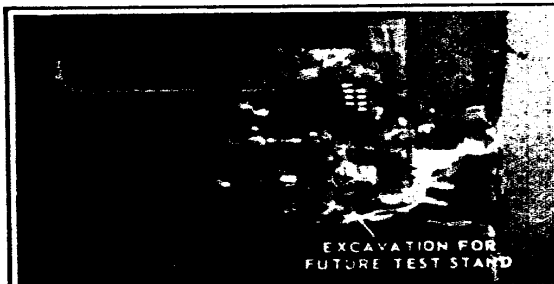
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Bitiya and 27 nm north of Omsk at an isolated spot on the east bank of the Irtysh River. This test facility may be related to the Omsk

Aircraft Engine Plant Baranova 29 [REDACTED] and the Omsk Aircraft Plant 166 [REDACTED]

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25X1D

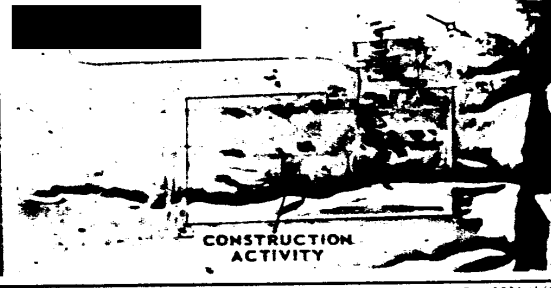
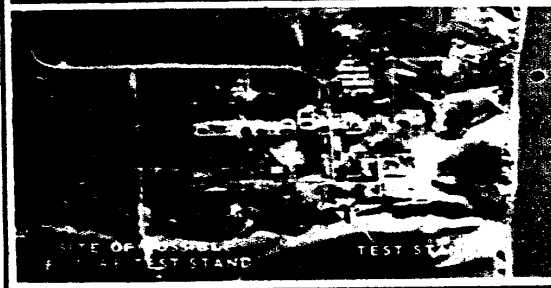


FIGURE 2. COMPARATIVE PHOTOGRAPHY OF THE OMSK STATIC TEST FACILITY.

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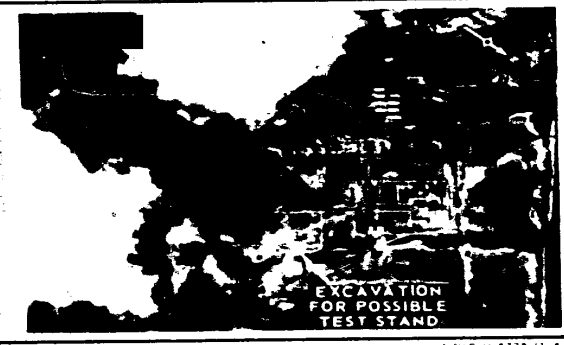
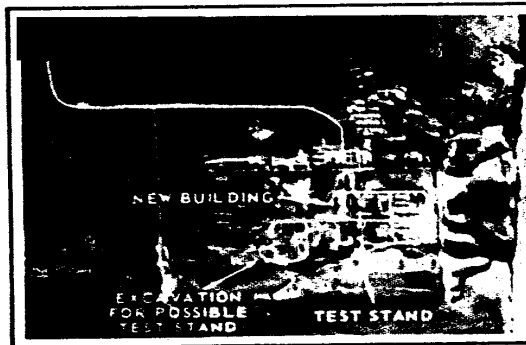


FIGURE 3. THE OMSK STATIC TEST FACILITY [REDACTED]

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This facility was first identified on photography of [REDACTED] from KEYHOLE [REDACTED]. A search on photography from previous missions revealed that the facility had been under construction in [REDACTED], a fact observed on KEYHOLE photography, but it was not visible on far-oblique tracker photography from TALENT [REDACTED]. The facility has since been observed on [REDACTED] photography. The

latest photographic coverage of the site was in [REDACTED].

In this report, the test facility is described principally as it appears on [REDACTED] photography. Chronological development of the site as observed on photography from successive missions is presented in Table 1 and illustrated on Figures 2 and 3. The line drawing of the installation, Figure 4, is based primarily on the [REDACTED] photography shown on Figure 3.

### DESCRIPTION OF THE FACILITY

The Omsk Static Test Facility is built on bluffs above the east bank of the Irtysh River. It consists of a vertical test stand, its adjoining operational support facilities, a possible test stand under construction, and other support facilities. Mensuration of the principal buildings, keyed to Figure 4, is presented in Table 2. These dimensions are considered to be accurate within a margin of error plus or minus 10 feet.

The greater part of this facility is secured by a double fence and guard towers. Within this fenced area are the test stand with its operational support buildings and the possible test stand under construction. Outside the large secured area are three small separately-fenced areas and an administration area. The facility is served by an improved road with long-radius turns and by a branch rail line terminating in two spurs which extend into the large secured area from the southeast (Figure 4).

#### VERTICAL TEST STAND

The completed vertical test stand (item 3, Figure 4) has been built in a large excavation. This excavation has been cut in the side of a deep ravine that extends from the river through the facility. Dimensions at the top of the excavation are about 550 by 400

feet. The three sides slope inward slightly to the floor of the excavation which is about 80 feet below the ground level of the facility. The test stand measures about 80 by 50 feet and has an overall height of approximately 135 feet. A concept of the excavation and test stand, based on stereo photography, is shown on Figure 5.

As shown on the illustration, a platform extends from the northwestern side of the test stand at about the 80-foot level which places it about even with the level of the ground at the top edge of the excavation. This platform appears to mark the base of the superstructure or tower. Thus, the tower is about 55 feet high and the base structure or blast deflector is about 80 feet high. The tower is enclosed.

A covered or two-level bridge about 25 feet wide provides access to the test stand from its operational support facilities. The lower level of the bridge is at ground level and is in line with a connecting service road. It leads to the platform extending from the side of the tower rather than directly into the tower. The upper level of the bridge is an estimated 40 feet above the lower level, and both levels are horizontal. The sides of the bridge between the two levels appear to be open except for

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structural members. The upper level turns at a 25-degree angle from the lower level and terminates in the tower rather than over the platform; at the other end it turns at the same angle away from the service road (Figure 5). This upper level may house hoisting equipment for the test stand. Another bridge extends from the side of the tower opposite

the platform to a control bunker near the top of the easternmost corner of the excavation. This bridge probably joins the tower a little below the level of the platform. A road cut into the side of the ravine and approaching the base of the excavation from the northwest provides access to the base of the test stand from the operational support area.

Table 1. Observed Chronological Development of the Omsk Static Test Facility

Mission	Date	Test Stand	Operational Support	Test Facility
		---	---	Not visible on far oblique tracker photography (TALENT) Road extending north from Omsk past site being improved
		Excavation only, test stand not visible	Checkout & assembly building (item 2) visible	Improved road into site, but continuation of this road north unimproved Two rail spurs into site probably under construction Twelve support buildings visible
		Shadow of test stand visible	Control bunker under construction Additional buildings (items 5, 7, 21) visible Building (item 23) under construction	Rail spurs complete Possible heating plant visible Additional support buildings visible Security fence visible
		Stand erected	Building (item 23) completed	Facility appears complete
		Stand appears complete	Appears complete	-----
		---	---	Possible pipeline culvert above ground connecting principal area with small fenced area
		Activity at site of possible second test stand	---	At least 2 possible buried vertical tanks and trenches at west corner of large fenced area
		Excavation for possible test stand being cut into ravine Much smaller than first test stand Inner rectangular area being excavated in floor of excavation	New building (item 6) in operational support area	----
		Inner excavation expanded to deepen floor of excavation at possible test stand	----	----

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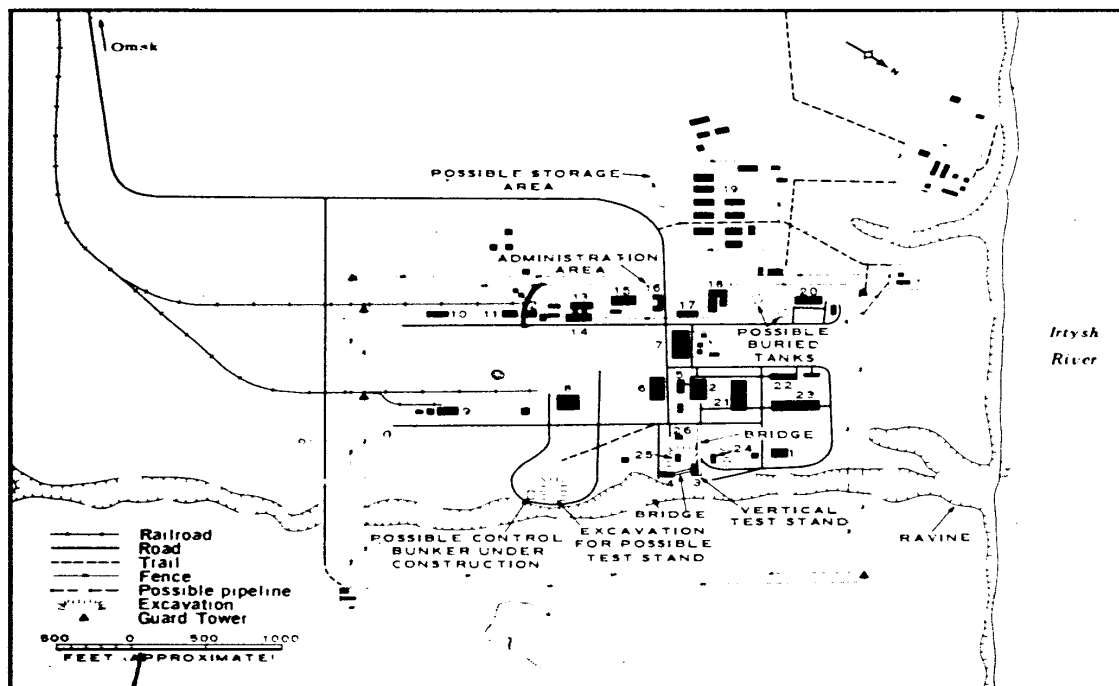


FIGURE 4. LINE DRAWING OF THE OMSK STATIC TEST FACILITY.

Table 2. Dimensions of Principal Buildings (Keyed to Figure 4)

Bldg	Length (Feet)	Width (Feet)	Roof Coverage (Square Feet)	Bldg	Length (Feet)	Width (Feet)	Roof Coverage (Square Feet)
1	110	x 75	8,250	14	150	x 65	9,750
2	170	x 115	18,975	15	140	x 70	9,800
3	80	x 50	---	16	Irregular		6,125
4	90	x 50	4,500	17	120	x 50	6,000
5	110	x 45	4,950	18	Irregular		17,400
6	170	x 90	15,300	19 (10)	120	x 50	60,000
7	200	x 95	19,000	20	155	x 65	10,075
8	130	x 115	14,950	21	245	x 70	17,150
9	120	x 55	6,600	22	155	x 50	7,750
10	120	x 55	6,600	23	300	x 70	10,075
11	95	x 50	4,750	24	80	x 30	2,400
12	95	x 50	4,750	25	50	x 25	1,250
13	130	x 50	6,500	26	60	x 30	1,800

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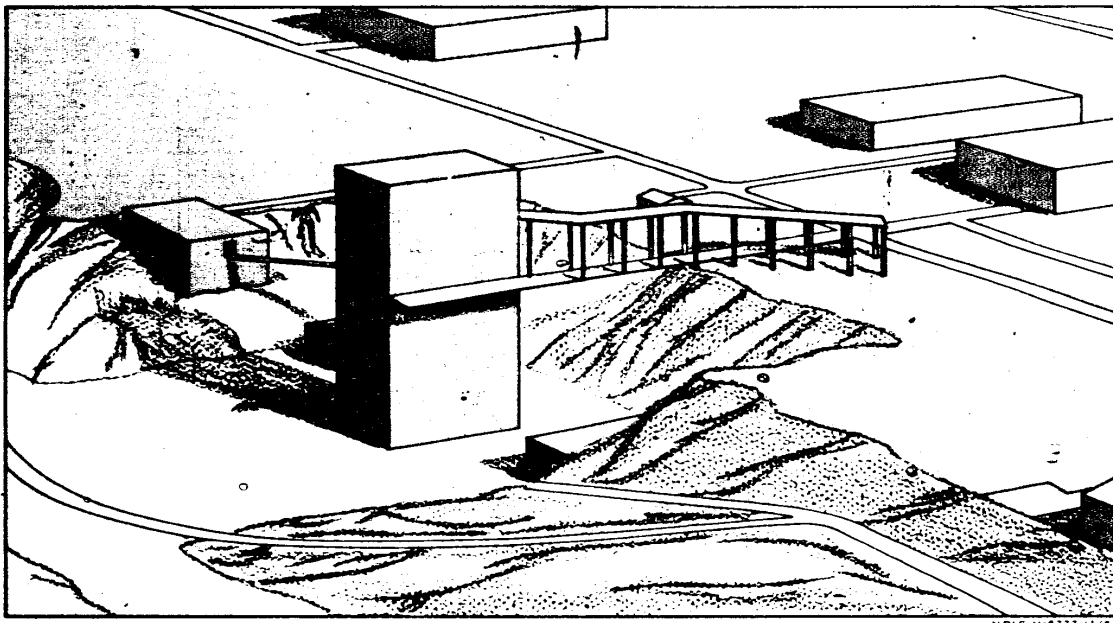


FIGURE 5. A CONCEPT OF THE VERTICAL TEST STAND.

**OPERATIONAL SUPPORT FACILITIES**

Associated with the vertical test stand are various support facilities. All of the items described here are keyed to Figure 4.

Two small structures (items 24 and 25) are located on the floor of the excavation, one on each side of the stand and toward the back of the excavation away from the blast area. A probable control bunker (item 4) is on the edge of the excavation approximately 235 feet east of the test stand to which it is connected by the previously mentioned bridge. Northwest of the excavation near the edge of the ravine is a structure (item 1) which has been reported to be a possible oxidizer/propellant storage point. 1/

The bulk of the operational support facilities, consisting of seven large buildings and six minor structures, are 500 to 800 feet south and west of the test stand. Immediately southwest of the test stand and in line with the two-level bridge is a probable checkout and assembly building (item 2). It measures approximately 170 by 115 feet and is 50 feet in height. The roof pattern indicates that it probably consists of two longitudinal bays. The road extending from the bridge enters the westerly bay, and an apron at the opposite end of the building gives access to both bays. This building is connected to an adjacent building (item 5) by a covered passageway or possible pipe gallery. Northwest of the probable



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checkout and assembly building is a building (item 21) which measures approximately 245 by 70 feet and is about 65 feet in height. A service road appears to pass through one end of this building, and one side may be open. On photography of [REDACTED] objects appear to protrude from the building above a low structure extending along the side.

Immediately southwest of the probable checkout and assembly building (item 2) is a building (item 7) measuring approximately 200 by 95 feet and 40 feet in height. This building has an attached fenced yard containing three unidentified objects or structures. Another large building of the operational support group is northwest of the probable checkout and assembly building (item 2) and southwest of the possible oxidizer/propellant storage point (item 1). This building (item 23) is large, measuring approximately 300 by 70 feet, and is lower than the other buildings. On its roof are a possible stack or vent and an off-center possible monitor estimated to be 100 by 15 feet. Alongside this building are three ground-level rectangular objects.

### POSSIBLE TEST STAND UNDER CONSTRUCTION

An excavation for a possible second test stand is being cut into the side of the ravine

about 1,000 feet east of the completed test stand. On photography of [REDACTED] the new excavation appeared to be much smaller than the excavation of the completed test stand. Construction activity was first seen on photography of [REDACTED] and the excavation was first seen on photography of [REDACTED]. Outside the excavation are a possible control bunker under construction and trenches for possible pipelines.

### OTHER SUPPORT FACILITIES

Other support facilities within the double-fenced area include a possible heating plant (item 11) and 16 other buildings. All but two of these are along the two rail spurs entering the facility. Outside the double-fenced area are five administrative buildings, other miscellaneous buildings, and three secured areas. One secured area contains 11 possible storage buildings; another contains eight miscellaneous buildings, and the third contains two buildings with a possible pipeline leading toward the main secured area. Some effort has apparently been made to exclude nonessential activities from the operational area; for instance, the double-fence line jogs inward to exclude the administrative buildings (Figure 4).

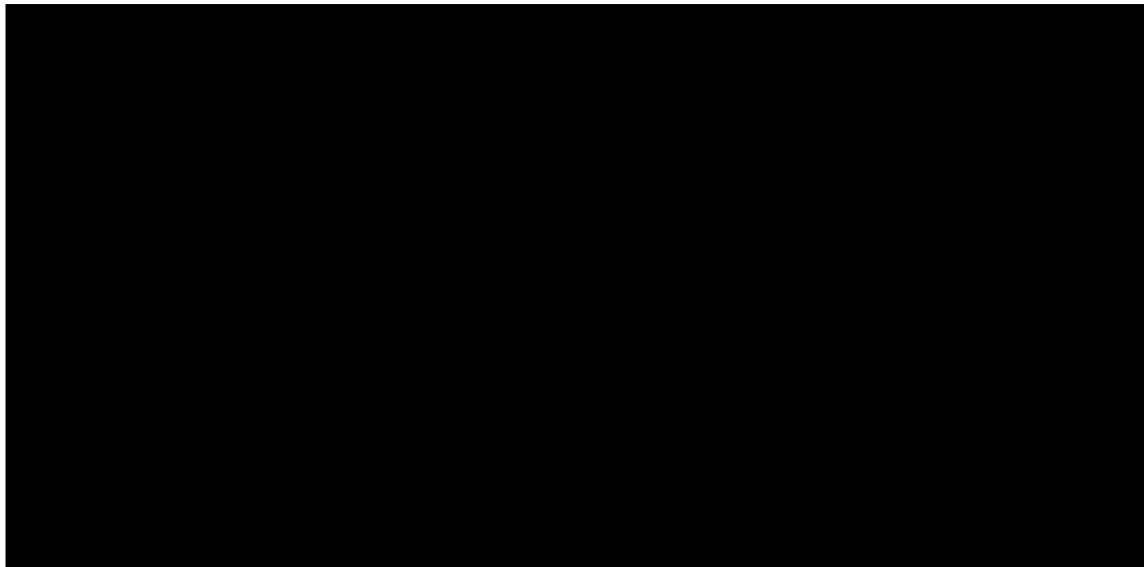
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**REFERENCES**

**PHOTOGRAPHY**



25X1D

**MAPS OR CHARTS**

- ACIC. USATC Series 200, Sheet 0163-5HL, 2d ed, Oct 62 (SECRET)
- ACIC. USATC Series 200, Sheet 0163-9A, 1st ed, May 59 (SECRET)
- ACIC. USATC Series 200, Sheet 0163-10HL, 2d ed, Sep 62 (SECRET)

**DOCUMENTS**

1. SAC. Omsk Rocket Engine Test Facility, A Detailed Study, 26 Jan 63, (TOP SECRET RUFF)

**RELATED DOCUMENT**



25X1C

**REQUIREMENT**

CIA. C-RR3-60,446

**NPIC PROJECT**

J-271.63

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